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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,150	01/08/2001	Toshiki Tajima	IL-10626	6360

7590 05/29/2003  
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EXAMINER

WELLS, NIKITA

ART UNIT PAPER NUMBER

2881

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/757,150

Applicant(s)

TAJIMA, TOSHIKI

Examiner

Nikita Wells

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-90 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-24, drawn to a target, having various layers, concave and curved shapes, and made from different materials, are classified in Class 313, subclass 363.1.

II. Claims 25-39, 43-45 and 69-87, drawn to a system, including a light source, a target, and means of delivering energy to the target, are classified in Class 250, subclass 398.

III. Claims 40-42, 48-50, 54-63, 66-68, and 88-90, drawn to a method of delivering a light pulse onto a target and channeling the formed ions into a beam for radiation therapy, are classified in Class 250, subclass 505.1.

IV. Claims 46-47, 51-53, and 64-65, are considered faulty claims because they are missing a key element and, therefore, will not be considered in this "Restriction Action". Claims 46-47 disclose a light source and an ion beam transport system with no correlation between the two since there is no target. Claims 51-53 disclose a light source and a means of delivering energy (through an ion beam) to a treatment field without the use of a target. Claims 64-65 disclose the adhering of layers of material, but there is no target to which these materials are to adhere to.

2. Inventions Group I, Group II, and Group III, , are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed as follows:

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With respect to the claims of Group I, which discloses a target, having various layers, concave and curved shapes, and made from different materials, but fails to disclose a light source, accelerator system, or method of delivering a light pulse onto a target can be independently patentable. The subcombination has separate utility such as receiving beams of electrons for X-ray production or ion beams used in neutron production or radiation therapy uses.

With respect to the claims of Group II, which discloses a light source including a fiber optic section, and a target, but no means of delivering energy to the target or any associated accelerator system, can be independently patentable. The subcombination has separate utility such as the use of a laser, as a light source, impinging upon a target to create ions as used in a sputter ion source.

With respect to the claims of Group III, which discloses a method and apparatus of delivering a light pulse onto a target and channeling the formed ions into a beam for radiation therapy, including an accelerator and beam transport system, but fails to disclose details of the target or the details of the interaction of the light source with the target, can be independently patentable. This subcombination has separate utility such as the creation of ions from the light pulse and the subsequent channeling of the ions into a beam for radiation therapy such as cancer therapy.

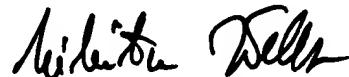
Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (703) 305-0416. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703) 308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Nikita Wells

Examiner

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Nikita Wells

May 23, 2003